

## ABSTRACT

The present invention provides improved chlortetracycline-containing animal feed compositions and processes and apparatuses for their preparation. In certain embodiments, raw fermentation broth comprising chlortetracycline is divided into two portions. The first portion is mixed with a compound that complexes chlortetracycline. The second portion is acidified and the solids are removed. The acidified liquid is treated with a complexing agent to produce a chlortetracycline complex. The first and second portions thus treated are then mixed and the mixture is passed on to a filter press or other means for separation of the solids to produce a wet cake comprising complexed chlortetracycline. In alternative embodiments, the second portion may be acidified and filtered and admixed with the first portion prior to the complexing step. The resulting mixture is passed on to a filter press or other means for separation of the solids. In still further embodiments, the complexing steps are replaced with neutralizing or basification steps to yield the free base form of chlortetracycline. The wet filter cake comprising chlortetracycline and fermentation solids is dried and sized to produce a dried semi-finished product in the form of a powder, meal, granules, pellets, tablets, etc. The semi-finished product may be standardized to produce an animal feed supplement having a desired potency. In a further aspect, the present invention relates to a method of combating microbial infection and promoting growth in animals comprising orally administering to said animals an effective amount of an animal composition according to the present invention.